

AIR QUALITY

MANAGEMENT DISTRICT

AUTHORITY TO CONSTRUCT

A/C NO.: 25229

DATE ISSUED: SEPTEMBER 28, 2017

ISSUED BY:


JORGE DEGUZMAN

DATE EXPIRES: SEPTEMBER 28, 2019

ISSUED TO: PHILLIPS 66 COMPANY

LOCATION: 76 BROADWAY, SACRAMENTO, CA 95818

DESCRIPTION: LOADING RACK AND VAPOR RECOVERY SYSTEM:

- A. FOUR GASOLINE LOADING ARMS, VENTED TO A VAPOR CONTROL UNIT (A/C 25230)
- B. FOUR DIESEL LOADING ARMS.
- C. TWO GASOLINE PUMPS, 40 HP EACH.
- D. TWO GASOLINE PUMPS, 50 HP EACH
- E. TWO ETHANOL PUMPS, 20 HP EACH.
- F. ONE DIESEL PUMP, 50 HP.

AUTHORITY TO CONSTRUCT CONDITIONS**START-UP REQUIREMENTS**

S1. After completing the equipment installation authorized under this Authority to Construct (ATC), the permit holder must contact the Sacramento Metropolitan Air Quality Management District (SMAQMD) to arrange a start-up inspection. SMAQMD may be contacted at (916) 874-4800.

[Basis: SMAQMD Rule 201, Section 405]

S2. This Authority to Construct may serve as a temporary Permit to Operate provided that:

- A. The permit holder has notified SMAQMD that the equipment installation is complete and the facility is ready for a start-up inspection,
- B. The equipment installed matches the equipment authorized in this Authority to Construct,
- C. The equipment is operated in compliance with all conditions in this Authority to Construct, and
- D. The equipment and its operation complies with SMAQMD, state and federal laws and regulations.

[Basis: SMAQMD Rule 201, Section 303.1, 405]

S3. The permit holder agrees to indemnify and defend SMAQMD, its officers, agents, and employees if this permit, or the environmental review of the permit under the California Environmental Quality Act (CEQA) or the National Environmental Policy Act (NEPA), including any exemption determination, is challenged in state or federal court. This indemnification includes attorney fees awarded against SMAQMD, as well as attorney fees, court costs, legal fees, and other expenses incurred in defending the challenge. The District will provide written notice to the permit holder within 5 days if it receives a petition, complaint or other legal notice by a third party challenging this Authority to Construct (ATC) or the environmental review of the

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ATC. The permit holder may, within 10 days of notification, request cancellation of the ATC. If the permit holder requests cancellation, SMAQMD will cancel the permit within 5 days, and will notify the plaintiffs of the cancellation and request dismissal of the litigation.

[Basis: SMAQMD Rule 201, Section 405]

GENERAL

1. The equipment must be properly maintained and operated in accordance with the information submitted with the application and the manufacturer's recommendations at all times.
[Basis: SMAQMD Rule 201, Section 405 and Rule 202, Section 408.1]
2. The Air Pollution Control Officer and/or authorized representatives must be permitted to do all of the following:
 - A. Enter the source premises or any location at which any records required by this ATC are kept.
 - B. Access and copy any records required by this ATC.
 - C. Inspect or review any equipment, operation, or method required under this ATC.
 - D. Sample emissions from the source or require samples to be taken.**[Basis: SMAQMD Rule 201, Section 405]**
3. This ATC does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the California Health and Safety Code or the SMAQMD Rules and Regulations.
[Basis: SMAQMD Rule 201, Sections 303.1, 405]
4. The facility may not discharge air contaminants or other materials that cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
[Basis: SMAQMD Rule 402, Section 301]
5. A legible copy of this ATC must be maintained on the premises with the equipment.
[Basis: SMAQMD Rule 201, Section 401]

EMISSION LIMITATIONS

6. The permit holder must not transfer or permit the transfer of organic liquid, with a vapor pressure greater than or equal to 0.5 psia under actual loading conditions, into any tank truck, trailer, or railroad tank car unless the organic liquid is transferred by bottom loading with dry break couplers and utilizes a vapor collection system venting to a vapor control unit so that the emissions to the atmosphere do not exceed 0.02 pounds of VOC per one thousand (1,000) gallons of organic liquids transferred.
[Basis: SMAQMD Rule 202, Section 408.2.a and Rule 447, Section 301]

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7. The emissions from the bulk terminal loading rack must not exceed the following:
[Basis: SMAQMD Rules 201, Section 405 and 202, Section 408.2]

Pollutant	Emission Factors (A) (lb/1000 gallons loaded)	Emission Limits (B)	
		lb/day	lb/year
VOC	0.02	14.6	5,339

(A) Emission factor for VOC is from San Diego APCD calculation procedure R01 – Bulk Gasoline Rack Emissions, Reformulated Gasoline (4/25/08).

(B) Emissions are based on operating at a maximum daily throughput of 630,000 gallons of gasoline, 69,300 gallons of ethanol, and 12.7% cross loading of 252,000 gallons of diesel, and operating 365 days per year. All emission limits are in English units.

Pollutant	Emission Factors (A) (lb/1000 gallons loaded)	Emission Limits (B) lb/quarter			
		Quarter 1 (Jan-Mar)	Quarter 2 (Apr-Jun)	Quarter 3 (Jul-Sept)	Quarter 4 (Oct-Dec)
VOC	0.02	1,316	1,331	1,346	1,346

(A) Emission factor for VOC is from San Diego APCD calculation procedure R01 – Bulk Gasoline Rack Emissions, Reformulated Gasoline (4/25/08).

(B) Emissions are based on operating at a maximum daily throughput of 630,000 gallons of gasoline, 69,300 gallons of ethanol, and 12.7% cross loading of 252,000 gallons of diesel, and operating 90 days for the first quarter, 91 days for the second quarter, and 92 days each for the third and fourth quarters. All emission limits are in English units.

8. The Facility Cap emissions must not exceed the following limits:
[Basis: SMAQMD Rules 201, Section 405]

Pollutant	Maximum Allowable Facility Cap Emissions (A) (tons/year)
VOC	24.4

(A) The Phillips 66 Facility Cap VOC emissions is comprised of all VOC emissions from equipment listed in Attachment A, located at 66 Broadway and 76 Broadway, Sacramento, CA 95818 and calculated in accordance with method outlined in Attachment A.

EQUIPMENT OPERATION

9. Organic vapors from the loading rack vapor recovery system must be vented to and controlled by the Vapor Control Unit (Authority to Construct 25230).
[Basis: SMAQMD Rule 201, Section 405]

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10. The total volume of organic liquids loaded through the loading racks must not exceed the following:
[Basis: SMAQMD Rule 201, Section 405]

Fuel Type	Maximum Allowable Fuel Loading (A)	
	gallons/day	gallons/year
Gasoline and transmix	630,000	229,950,000
Ethanol	69,300	25,294,500
Diesel	252,000	91,980,000

(A) Annual throughput limits are based on the daily throughput limits times 365 days per year.

Fuel Type	Maximum Allowable Fuel Loading (A) gallons/quarter			
	Quarter 1 (Jan-Mar)	Quarter 2 (Apr-Jun)	Quarter 3 (Jul-Sept)	Quarter 4 (Oct-Dec)
Gasoline and transmix	56,700,000	57,330,000	57,960,000	57,960,000
Ethanol	6,237,000	6,306,300	6,375,600	6,375,600
Diesel	22,680,000	22,932,000	23,184,000	23,184,000

(A) Quarterly throughput limits are based on the daily throughput limits times 90 days for the first quarter, 91 days for the second quarter, and 92 days for the third and fourth quarters.

11. The permit holder must not load organic liquids into any tank truck, trailer, or railroad truck car unless the loading facility is equipped with a CARB certified vapor collection and disposal system.
[Basis: SMAQMD Rule 447, Section 303]

12. The loading rack must be maintained leak free and vapor tight.
- A. Leak free is defined as a liquid leak of less than three drops per minute excluding losses which occur upon disconnecting transfer fittings, provided that such disconnect losses to not exceed one (1) fluid ounce, averaged over three disconnects.
 - B. Vapor tight is defined as a concentration of total organic compounds, measured one (1) centimeter from any source, which does not exceed 10,000 ppm (expressed as methane) above background, as determined by U.S. EPA Method 21
- [Basis: SMAQMD Rule 447, Section 304]**

13. Loadings of liquid product into gasoline tank trucks must be limited to vapor tight gasoline tank trucks using the procedures of Condition Nos. 14-21.
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)]

14. The owner or operator must require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(1)]

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15. The terminal owner or operator must obtain the vapor tightness documentation described in Condition No. 13 for each tank truck which is to be loaded at the affected facility.
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(2)]
16. The terminal owner or operator must cross-check each tank identification number obtained in Condition No. 14 with the vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(3)(i)]
- A. If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation, then the documentation cross-check must be performed each quarter;
or
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(3)(i)(A)]
- B. If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation, then the documentation cross-check must be performed semiannually.
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(3)(i)(B)]
17. If either the quarterly or semiannual cross-check provided in Condition Nos. 16A or 16B reveal that these conditions are not being maintained, the source must return to bi-weekly monitoring until such time as these conditions are again met.
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(3)(ii)]
18. The terminal owner or operator must notify the owner or operator of each non-vapor tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross check in Condition No. 15.
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(4)]
19. The terminal owner or operator must take steps assuring that the non-vapor tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank truck is obtained.
[Basis: 40 CFR Part 60 Subpart XX §60.502(e)(5)]
20. The terminal owner or operator shall act to assure that the loadings of gasoline tank trucks at the affected facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.
[Basis: 40 CFR Part 60 Subpart XX §60.502(f)]
21. The terminal owner or operator must act to assure that the bulk terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks.
[Basis: 40 CFR Part 60 Subpart XX §60.502(g)]

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22. A pressure measurement device (liquid manometer, magnahelic gauge, or equivalent instrument), capable of measuring up to 500 mm (19.7 in) of water gauge pressure with +/- 2.5 mm (0.1 in) of water precision, must be calibrated and installed on the terminal's vapor collection system at a pressure tap as close as possible to the connection with the gasoline tank truck.
[Basis: 40 CFR Part 60 Subpart XX §60.503(d)(1)]
23. The vapor collection and liquid loading equipment must be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 Pascals [450 mm (17.7 inches) of water] during product loading.
[Basis: 40 CFR Part 60 Subpart XX §60.502(h)]
24. No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system may begin to open at a system pressure less than 4,500 Pascals [450 mm (17.7 inches) of water].
[Basis: 40 CFR Part 60, Subpart XX §60.502(i)]

MONITORING REQUIREMENTS

25. A result by any of the below listed test methods which shows non-compliance with any provision of SMAQMD Rule 447 will constitute a violation:
- A. Leak Detection: U.S. EPA Reference Method 21 must be used to determine vapor tight conditions.
 - B. Vapor Pressure: Vapor pressure may be obtained from standard reference texts or may be determined by ASTM D-2879-83 or ASTM D-323-82.
 - C. Determination of Compounds Exempt from VOC Definition: If any of the perfluorocarbons are being claimed as exempt compounds, the person making the claim must state in advance which compounds are present, and the U.S. EPA approved test method used to make the determination of these compounds.
- [Basis: SMAQMD Rule 447, Section 501]**
26. Each calendar month, the vapor collection system and each loading rack handling gasoline must be inspected during the loading of the gasoline tank trucks for total organic compounds liquid or vapor leaks. For the purposes of this condition, detection methods incorporating sight, sound or smell are acceptable. Each detection of a liquid or vapor leak must be recorded. When a leak is detected, an initial attempt at repair must be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment must be completed within 15 calendar days after detection of each leak.
[Basis: 40 CFR Part 60 Subpart XX §60.502(j) and 40 CFR Part 63 Subpart BBBB §63.11089]

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RECORDKEEPING

27. The following records must be continuously maintained onsite for the most recent five year period and must be made available to the Air Pollution Control Officer upon request. Monthly and quarterly records must be made available for inspection within 30 days of the end of the reporting period

[Basis: SMAQMD Rule 201, Section 405, Rule 477 Section 502, and 40 CFR Part 60 Subpart XX]

Frequency	Information to be Recorded
At All Times	<p>A. Tank truck vapor tightness documentation required by Condition No. 15. [Basis: 40 CFR 60 Subpart XX §60.505(a) and 40 CFR 63 Subpart BBBB §63.11094(b)(1)]</p> <p>B. Documentation of all notifications required under Condition No. 18. [Basis: 40 CFR 60 Subpart XX §60.505(d)]</p> <p>C. A record of all replacements or additions of components performed on an existing vapor processing system. [Basis: 40 CFR 60 Subpart XX §60.505(f)]</p> <p>D. The documentation file for each gasoline tank truck must be kept up-to-date to reflect current test results as determined by California Air Resources Board Certification Procedure CP-204. [Basis: 40 CFR Part 60 Subpart XX §60.505(b) and 40 CFR 63 Subpart BBBB §63.11094(b)(2)]</p> <p>E. This documentation must include, at a minimum, the following information:</p> <ul style="list-style-type: none"> i. Test title: California Air Resources Board Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks. ii. Tank owner and address. iii. Tank identification number. iv. Testing location. v. Date of test. vi. Tester name and signature. vii. Witness inspector, if any: name, signature, and affiliation. viii. Test results: average pressure change in 5 minutes, mm of water (average for 2 runs). <p>[Basis: 40 CFR Part 60 Subpart XX §60.505(b) and 40 CFR 63 Subpart BBBB §63.11094(b)(2)]</p>
Daily	<p>F. Volume of gasoline, transmix, ethanol, and diesel loaded through the loading racks (gallons/day).</p>

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Frequency	Information to be Recorded
Monthly	<p>G. A record of each monthly leak inspection required by Condition No. 26 must be kept on file at the bulk terminal. Inspection record must include, at a minimum, the following information:</p> <ul style="list-style-type: none"> i. Date of inspection. ii. Findings (may indicate no leaks discovered or nature, location, and severity of each leak). iii. Leak determination method. iv. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 days). v. Inspector name and signature. vi. For each leak that is detected, the following specified information must be recorded: <ul style="list-style-type: none"> (a) The equipment type and identification number. (b) The nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell). (c) The date the leak was detected and the date of each attempt to repair the leak. (d) Repair methods applied in each attempt to repair the leak. (e) Repair delayed and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak. (f) The expected date of successful repair of the leak if the leak is not repaired within 15 days. (g) The date of successful repair of the leak. <p>[Basis: 40 CFR Part 60 Subpart XX §60.505(c) and 40 CFR Part 63 Subpart BBBBBB §63.11094(e)]</p>
Quarterly	<p>H. Volume of gasoline, transmix, ethanol, and diesel loaded through the loading racks (gallons/quarter).</p> <p>I. Total Facility Cap VOC emissions (A) calculated in accordance with the most recent version of Attachment A, as amended by the latest permit issued to Phillips 66 (pounds/quarter)</p>
Annually	<p>J. Volume of gasoline, transmix, ethanol, and diesel loaded through the loading racks (gallons/year).</p> <p>K. Total Facility Cap VOC emissions (A) calculated in accordance with the most recent version of Attachment A, as amended by the latest permit issued to Phillips 66 (tons/year)</p>

(A) The Phillips 66 Facility Cap VOC emissions is comprised of all VOC emissions from equipment listed in Attachment A, located at 66 Broadway and 76 Broadway, Sacramento, CA 95818

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REPORTING REQUIREMENTS

28. Within 30 days after the end of each semiannual period (January 1 to June 30 and July 1 to December 31), the permit holder must submit a compliance report to the U.S. EPA and the District. The report may be combined with the information required for other equipment located at the facility but must include the following for the loading rack:

- A. Each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility.
- B. For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection.

[Basis: 40 CFR Part 63 Subpart BBBBBB §63.11095(a)(2) and (3)]

29. The permit holder must submit on a semiannual basis an excess emissions report at the time of the semiannual compliance report to the U.S. EPA and the District. The report must include the information specified in 40 CFR Part 63 Subpart BBBBBB §63.11095(b)(1) through (5).

[Basis: 40 CFR Part 63 Subpart BBBBBB §63.11095(b)]

30. The permit holder must submit a semiannual report including the number, duration, and a brief description of each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emissions limitation to be exceeded. The report must include a description of actions taken by the permit holder during a malfunction to minimize emissions, including actions taken to correct a malfunction. The report may be submitted as part of the semiannual compliance report.

[Basis: 40 CFR Part 63 Subpart BBBBBB §63.11095(d)]

EMISSION OFFSETS

31. Prior to commencing operation, Phillips 66 must provide sufficient emission reduction credits to the Air Pollution Control Officer to fully offset the following amount of emissions:

[Basis: SMAQMD Rule 201, Section 303.1]

VOC Emissions to be Offset (A) Pounds/Quarter			
Quarter 1	Quarter 2	Quarter 3	Quarter 4
1,316	1,331	1,346	1,346

(A) Emission offset ratios required by Rule 202, Section 303 have not been applied to the VOC emissions.

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32. The following emission reduction credits (ERCs) must be surrendered by Phillips 66 to offset the amounts specified in Condition No. 31 prior to commencing operation.

[Basis: SMAQMD Rule 202, Sections 408 and Section 409, and Rule 205, Section 316]

Emission Reduction Credits	Pollutant	Emission Offsets Provided (lb/quarter)			
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ERC Certificate No. 12-01167 (A)	VOC	40.3	0.6	22.6	83.9
ERC Loan No. C17-1002 from the Community Bank (B, C)	VOC	1,282.4	1,330.5	1,327.2	1,276.1

(A) Emission offset provided at an offset ratio of 1.2 to 1.0.

(B) These credits are returned to the Community Bank if the permit is surrendered, revoked, not renewed or ownership is transferred.

(C) Emission offset was provided at an offset ratio of 1.0 to 1.0.

33. The borrowed emission reduction credits from the Community Bank specified in Condition No. 32 are valid only if the facility operates in a manner consistent with the requirements of Rule 205 – COMMUNITY BANK AND PRIORITY RESERVE BANK and the facts, including the information provided in the application, that were presented to the Board of Directors.

[Basis: SMAQMD Rule 205, Section 307.7]

34. In order for ownership of this process to be transferred, the new owner must provide replacement credits for those credits that were returned pursuant to Condition No. 32.

[Basis: SMAQMD Rule 205, Section 315]

35. The permit will expire on October 1, 2047, unless replacement credits have been provided. To replace the Community Bank credits specified in Condition No. 32, the facility must submit an application to modify the current permit six months prior to October 1, 2047. Failure to provide replacement credits after October 1, 2047, will require the facility to reapply for a permit and the emission unit will be subject to Rule 202 – NEW SOURCE REVIEW at the time of re-permitting.

[Basis: SMAQMD Rule 205, Section 307 and Section 312]

36. The permit holder must, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxic “Hot Spots” Information and Assessment Act (California Health and Safety Code Section 44300 et seq.).

[Basis: SMAQMD Rule 201, Section 303.1]

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Your application for this air quality Authority to Construct was evaluated for compliance with Sacramento Metropolitan Air Quality Management District (SMAQMD), state and federal air quality rules. The following list identifies the rules that most commonly apply to the operation of your equipment. Other rules may also be applicable.

<u>SMAQMD RULE NO.</u>	<u>RULE TITLE</u>
201	GENERAL PERMIT REQUIREMENTS (8-24-06)
202	NEW SOURCE REVIEW (8-23-12)
401	RINGELMANN CHART (4-19-83)
402	NUISANCE (8-3-77)
447	ORGANIC LIQUID LOADING (4-2-98)
<u>FEDERAL</u>	<u>REGULATION TITLE</u>
40 CFR 60 SUBPART XX	STANDARDS OF PERFORMANCE FOR BULK GASOLINE TERMINALS
40 CFR 63 SUBPART BBBBB	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE BULK TERMINALS, BULK PLANTS, AND PIPELINE FACILITIES

The conditions on this Authority to Construct reflect some, but not all, of the requirements of these rules. Because other rule requirements may apply to the operation, the permit holder should be familiar with all of the rules and related requirements. In addition, because future changes in prohibitory rules may establish more stringent requirements that may supersede the conditions listed here, the permit holder should monitor proposed rules and rule adoption actions at SMAQMD.

For further information please consult your SMAQMD rulebook or contact the SMAQMD for assistance.